

DETAILED ACTION

Applicant's submission of **supplemental after final on 08/04/2010** is duly acknowledged and entered.

Claims 1-30 are currently pending in this application.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with **Gordon P. Klancnik** (attorney of record) on August 13th 2010.

The application has been amended as follows:

In The Claims

Rejoinder of All claims

Claims 1-30 are directed to an allowable product, "isolated living cells comprising nanopatch sensors" (see claims 1-6, in particular), method of making and using the same.

Pursuant to the procedures set forth in MPEP § 821.04(B), and upon further consideration of the amendments put forth by the applicants, instant claims 7-30, which were directed to a process of making and using said product (see examiner's amendments to the claims below), **previously withdrawn from consideration** as a result of a restriction requirement, are **hereby rejoined** and fully examined for patentability under 37 CFR 1.104.

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Because all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, the **restriction requirement** as set forth in the Office action mailed on June 1st 2009 is hereby **withdrawn**. In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claims including all the limitations of an allowable product claim or rejoined process claim are presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Claims 1-30 (rejoined all the groups, I-VI) have been examined and allowed by this examiner's amendment.

Claims 7, 9, 10, 13, 14, 20, 21, 24 and 26 have been amended and allowed as follows:

7. (Currently Amended) A process for producing living cells comprising the aforementioned nanopatch sensors according to claim 1, wherein said process comprises the steps of preparing an aqueous solution comprising the perturbation-sensitive construct from construct precursors, ~~or precursors thereof~~, and co-incubating a suspension of said living cells with said construct ~~or construct precursors~~, such that said construct becomes integrated into the cell membrane of said living cells.

9. (Currently Amended) The process according to claim 8, wherein the polymerizable material is a monomer that may be polymerized to form ~~PDA~~ polydiacetylene (PDA).

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10. (Currently Amended) The process according to claim 9, wherein the monomer is ~~10,12-tricosadionic acid~~ 10, 12-tricosadiynoic acid, and the lipid components are selected from the group consisting of dimyristoylphosphatidylglycerol, dimyristoylphosphatidylcholine and dimyristoylphosphatidylethanolamine.

13. (Currently Amended) The method according to claim 12, wherein the polymer is ~~PDA~~ polydiacetylene (PDA).

14. (Currently Amended) The method according to claim 13, wherein the PDA is a polymer of ~~10,12-tricosadionic acid~~ 10, 12-tricosadiynoic acid, and the lipid components are selected from the group consisting of dimyristoylphosphatidylglycerol, dimyristoylphosphatidylcholine and dimyristoylphosphatidylethanolamine.

20. (Currently Amended) Isolated living prokaryotic cells comprising nanopatch sensors integrated into the cell wall and/or cell membrane thereof, wherein said sensors are provided in the form of perturbation-sensitive constructs, and wherein said perturbation-sensitive constructs respond to perturbations of the cell wall and/or of the underlying cell membrane by means of a detectable change in one or more physical or chemical properties associated with said construct, and wherein the nanopatch sensors are prepared prior to fusion into the membranes of said living cells.

21. (Currently Amended) The isolated prokaryotic cells according to claim 20, wherein the perturbation-sensitive constructs comprise a ~~PDA~~ polydiacetylene (PDA) polymer associated with one or more lipid components selected from the group consisting of dimyristoylphosphatidylglycerol, dimyristoylphosphatidylcholine and dimyristoylphosphatidylethanolamine.

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24. (Currently Amended) A process for producing living prokaryotic cells comprising the aforementioned nanopatch sensors according to claim 20, wherein said prokaryotic cells have a cell wall as their outer layer, and wherein said process comprises the steps of preparing an aqueous solution comprising the perturbation-sensitive construct from construct precursors, ~~or precursors thereof~~, and co-incubating a suspension of said living cells with said construct ~~or construct precursors~~, such that said construct becomes integrated into the cell wall and/or cell membrane of said cells.

26. (Currently Amended) The process according to claim 25, wherein the polymerizable material is ~~10,12-tricosadionic acid~~ 10, 12-tricosadiynoic acid, and the lipid components are selected from the group consisting of dimyristoylphosphatidylglycerol, dimyristoylphosphatidylcholine and dimyristoylphosphatidylethanolamine.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SATYENDRA K. SINGH whose telephone number is (571)272-8790. The examiner can normally be reached on 9-5MF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JON P. WEBER can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Satyendra K. Singh/
Examiner, Art Unit 1657

/JON P WEBER/
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